

## ABSTRACT OF THE DISCLOSURE

5       METHOD AND SYSTEM FOR GRID-ENABLED VIRTUAL MACHINES  
          WITH DISTRIBUTED MANAGEMENT OF APPLICATIONS

10       A method, apparatus, computer program product, and  
data processing system provide for operation of a virtual  
machine with embedded functionality for interoperating  
with other virtual machines in a computational grid. A  
plurality of virtual machines are run on one or more  
devices within a data processing system; each virtual  
machine incorporates functionality for interoperating and  
15       associating with other virtual machines in a virtual  
machine cluster in a grid-like manner. Each virtual  
machine in the virtual machine cluster acts as a node  
within the virtual machine cluster. The virtual machines  
share information such that a virtual machine may be  
20       added to the virtual machine cluster or such that a  
virtual machine may be removed from the virtual machine  
cluster as the virtual machine cluster continues to run.  
Load-balancing operations may be performed within the  
virtual machine cluster, and threads and objects may be  
25       moved within the virtual machine cluster.